

Amendments to the Drawings:

Amendments to the drawings are shown in the attached annotated sheet.

REMARKS

This amendment is in response to the Office Action of November 1, 2006.

The Examiner rejected claims 1-12 under 35 U.S.C 101 as directed to non-statutory subject matter. Further, the Examiner rejected claims 1, 2 and 7 under 35 U.S.C 103(a) as obvious over Huggett et al. (US 6,201,715).

Applicants have cancelled claims 1 to 12 and have substituted new claims 13 to 19.

The new claims include two independent claims, 13 and 19. The new claims are based on subject matter of original claim 3. New dependent claims 14 to 18 are based on original claims 4 to 8.

New claim 13 is directed to a method for controlling an electrical network. Support for this can be found in paragraph [0003] where it is stated that negative sequence components can be utilized in monitoring and controlling an electrical network.

New claim 19 is directed to a method for compensating a voltage unbalance in an electrical network. Support for this can be found in paragraph [0005] where it is stated that the method according to the invention can be utilized with compensation methods of voltage unbalance in an electrical network.

As mentioned above, the subject matter of new independent claims 13 and 19 is based on original claim 3. However, instead of simply writing the features of original claim 3 after the features of original claim 1, applicants have changed the order of method steps in the claims so as to make new independent claims as logical as possible. In new independent claims, the method steps of original claim 3 have been organized to correspond the order said steps appear in block diagrams of Figs. 2 and 3, which should

make it easier to understand the contents of the claims by tracking the drawing figures. Also the new independent claims include more information on how data acquired in previous steps is utilized by subsequent steps.

The claims have been clarified so that that the components of the major and minor semi-axes of the ellipse formed by the space vector of the space vector quantity are determined based on earlier determined zeros of derivative of the length of the space vector. Further the claims have been clarified so that the magnitude of the negative sequence component of the space vector quantity and the location of the negative sequence component of the space vector quantity in relation to a positive sequence component are determined based on earlier determined components of the major and minor semi-axes of the ellipse formed by the space vector.

Further applicants submit a new drawing sheet. In the new drawing page erroneous underlining of term $u_{2,NSS}$ has been removed from Fig. 3. The removal of said erroneous underling emphasizes the fact that in Figure 3 term $u_{2,NSS}$ is not a vector. It is believed that no new matter is introduced by virtue of the drawing change.

It is therefore believed that new independent claims 13 and 19 set forth tangible and concrete results. And this overcomes the technical rejection.

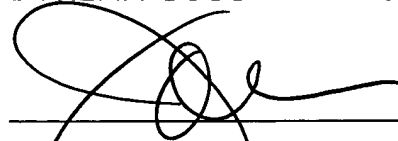
Regarding the rejection over Huggett et al. (US 6,201,715), Applicants assert that the reference does not disclose the features of new independent claims 13 and 19. In particular, Huggett et al. does not mention anything about determining the derivative of the length of the space vector and utilizing the zeros of said derivative when determining the components of the major and minor semi-axes of the ellipse formed by the space vector. Utilizing said derivative is disclosed in paragraphs [0016] and [0017].

In view of the foregoing, it is believed that new independent claims 13 and 19 are new and inventive over Huggett et al. (US 6,201,715).

The Director is hereby authorized to charge any fees required, including the fee for any extensions of time, to Deposit Account No. 04-2223.

Respectfully submitted,

DYKEMA GOSSETT PLLC

A handwritten signature in black ink, appearing to read 'John P. DeLuca', is written over a horizontal line.

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Annotated Sheet

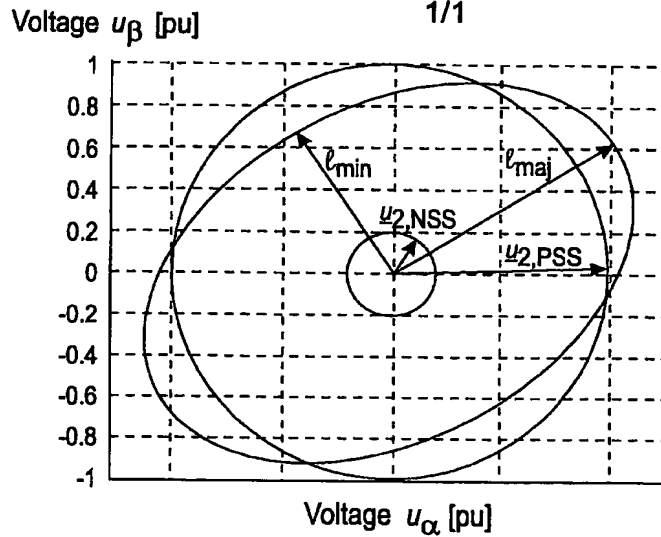


Fig. 1

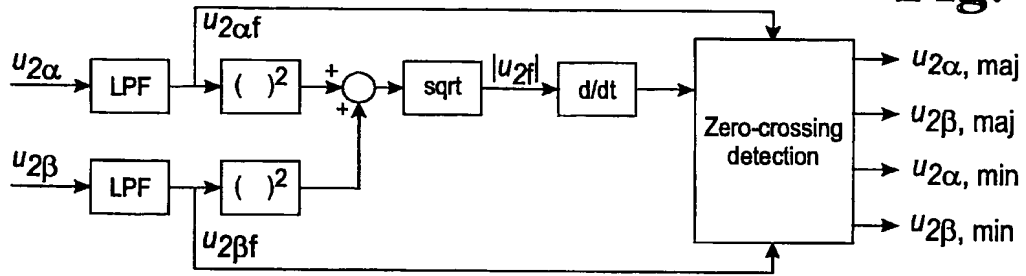


Fig. 2

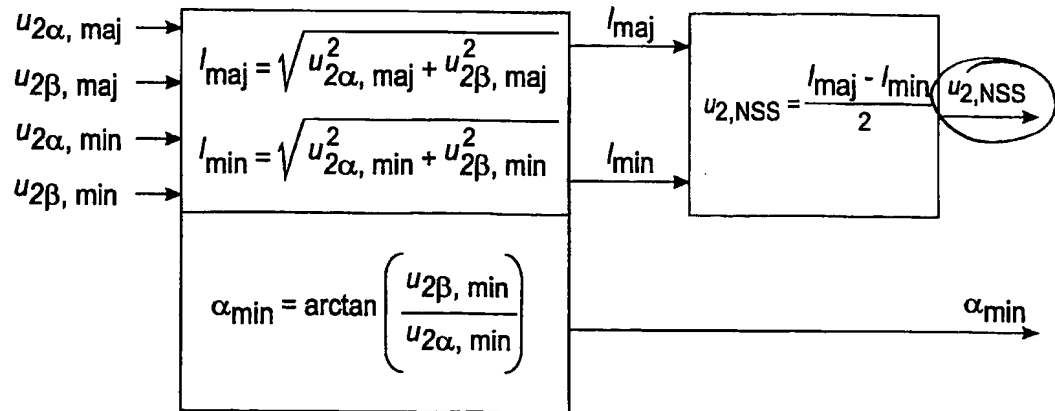


Fig. 3